

Northwest Innovation Works-Kalama
VOLUNTARY GREENHOUSE GAS MITIGATION PROGRAM
May 28, 2019

Purpose and Voluntary Mitigation Program Overview

NWIW is committed to producing a cleaner, less greenhouse gas (“GHG”) intensive methanol to reduce the environmental impacts of producing everyday products from polar fleece to contact lenses. In furtherance of this mission, NWIW proposes to voluntarily mitigate for 100 percent of all in-state direct and indirect GHG emissions from the Kalama Manufacturing and Marine Export Facility (“Facility”), as more fully described in **Attachment A**. In implementing the Voluntary Mitigation Program (“VMP”), NWIW will partner with stakeholders with shared interests and expertise in GHG mitigation and climate impacts, including state, tribal and local governments, environmental and environmental health nonprofit organizations, and labor.

As explained in the Facility’s Draft and Final Supplemental Environmental Impact Statements (collectively the “EIS”), NWIW’s VMP is intended to encompass and exceed permit conditions that have been applied to our Project, including Condition 4 of the June 8, 2017 Shoreline Conditional Use Permit (“SCUP”). Now, NWIW has not only committed to fulfilling the mandate of the state’s Clean Air Rule (legal challenge notwithstanding), we have committed to fully offsetting in-state GHG impacts as identified in the Supplemental EIS. Our VMP is also committed to looking first to opportunities for GHG mitigation and reduction in southwest Washington and Washington state, where our facility will operate, and in communities that will suffer disproportionately from a changing climate. In so doing, NWIW is doing its part to reduce environmental impacts from manufacturing and demonstrating its commitment to go beyond regulatory requirements in limiting environmental impacts in Washington.

VMP Oversight Framework

NWIW will implement the VMP in partnership with environmental, business and community stakeholders. In addition to general outreach, NWIW will establish a VMP governing board to provide knowledgeable, objective, unbiased oversight of the VMP (“VMP Board”). NWIW will facilitate VMP administration, but will build a Board of Directors to oversee emission reporting requirements, to determine mitigation obligations, and to identify and approve voluntary mitigation projects. The VMP Board shall be comprised of representatives from, state, tribal and local governments and the public, including representation from labor, environmentally focused nonprofit organizations and environmental justice organizations.¹ The VMP Board will be charged with formally drafting the VMP governing documents consistent with this document to disperse GHG mitigation funds to meaningfully impactful cost-effective carbon reduction or offset projects, programs that provide verifiable GHG mitigation or carbon offset credits from established registries. The VMP Board will be required to provide a regular accounting of mitigation actions and outcomes to Cowlitz County and the Department of Ecology, subject to their agreement and/or further direction on VMP accountability.

¹ NWIW is undertaking research as to how to configure and account for the VMP, including consideration of forming an independent nonprofit arm to administer the funds.

VMP GHG Mitigation Methods and Priorities

Mitigation Methods

The VMP Board will meet the 100 percent GHG mitigation commitment for in-state emissions by soliciting proposals from third parties for GHG mitigation or reduction projects. Ultimately, NWIW seeks to have a portfolio of cost effective, verifiable carbon sequestration and reduction projects that achieve full mitigation for VMP Emissions.

The VMP obligations based on Project VMP GHG Emissions may be accomplished through a variety of methods, including:

1. Investments made by the VMP Board in U.S.-based projects and programs that cause additional and verifiable carbon emission reductions; and
2. Investments made by the VMP Board in projects and programs that cause additional and verifiable carbon sequestration in the Pacific Northwest.

The VMP Board will require project applicants to verify their GHG reduction or offset benefits through protocols published by established registries, including, but not limited to, Verra (formerly Verified Carbon Standard), American Carbon Registry, Climate Action Reserve, or the Gold Standard.²

Where the VMP Board is unable to identify a portfolio of cost effective carbon reduction or sequestration projects that fully mitigate for VMP obligations, the Board shall purchase verified carbon credits through U.S. carbon credit markets or voluntary U.S. carbon registries. Examples of qualifying GHG mitigation markets include the Regional Greenhouse Gas Initiative or California Cap-and-Trade allowances/credits.

Whether the portfolio is “cost-effective” is measured by whether the total cost of the VMP portfolio is equal to the total VMP obligation multiplied by the cost of U.S. carbon market credits. Where the portfolio exceeds this benchmark, the VMP Board shall discharge its obligations through the purchase of carbon credits from regulated U.S. carbon markets.

Mitigation Priorities

The VMP Board will prioritize projects which are located in southwest Washington and Washington State. The VMP Board will also prioritize projects that generate co-benefits, including benefits to ecological systems, endangered and threatened species, and communities that have high environmental and health disparities that may be exacerbated by climate change.

In the selection of third party carbon reduction projects, the VMP Board will make all reasonable efforts to invest GHG mitigation funds in local projects, giving priority to:

1. Projects within Cowlitz County
2. Projects within Southwest Washington

² This nonexclusive list of offset verification programs are examples of protocols use to calculate offsets before the California Air Resources Board. See <https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.html>.

3. Projects within the state of Washington
4. Projects within the Pacific Northwest

Recognizing that some communities have a disproportionate share of environmental burden, the VMP will give preference to:

- Projects located within communities defined by the Washington State Department of Health as having high Environmental Health Disparities
- Projects located in communities with high unemployment

Duration

NWIW's voluntary GHG mitigation program will commence upon start of construction of the Facility and will continue for the life of its operation (currently estimated at 40 years). If, during that time, there is a comparable national, state, or local programmatic, regulatory, or statutory framework adopted for reducing and/or mitigating GHG emissions (including, for example, imposition of a carbon tax or GHG emission cap and/or reduction programs for industrial facilities) that directly applies to the proposed project and replaces some or all of the full mitigation contemplated, then that alternative GHG emission mitigation requirement shall replace all or part of the VMP obligation as applicable.

Greenhouse Gas Emission Accounting

NWIW is committed to accounting for its VMP obligation based on the best available scientific information, including information from international associations who publish consensus approaches to GHG accounting.³ The VMP shall include all direct and indirect emissions from the Facility that occur within the State of Washington ("VMP Emissions"). This number generally tracks the "Baseline Scenario" in the Project EIS, associated Life Cycle Analysis and Supplemental Life Cycle Analysis (collectively "LCA"), and as detailed in **Attachment A**.

As set forth in **Attachment A**, VMP Emissions that can be directly tracked will be included in the VMP using emissions data. For those VMP Emissions subject to reporting requirements under WAC Chapter 173-441, *Reporting of Emissions of Greenhouse Gases*, the methodologies for measuring and calculating Project VMP GHG Emissions shall be as provided in that WAC chapter, including the provisions of 40 C.F.R. Part 98 that are incorporated by reference. This approach is consistent with the state's Clean Air Rule (legal challenge notwithstanding). VMP Emissions that are not subject to the provisions of WAC Chapter 173-441, shall be measured, calculated or estimated as described in **Attachment A**, or by such other method as may be approved by the VMP Board.

Construction Emissions

VMP Emissions includes all project-related construction emissions. Construction emissions will be offset in the year they are emitted rather than being pro-rated over the life of the Facility as

³ For example, the Intergovernmental Panel on Climate Change ("IPCC") publishes assessment reports providing guidance of GHG accounting methodologies.

estimated in the EIS and SEIS. If the VMP Board is not yet constituted prior to Project construction, VMP obligations may be banked and spent in conjunction with the first-year of VMP operational obligations. Alternatively, the County, in consultation with the Department of Ecology, might pre-determine a GHG mitigation project that meets the GHG offset requirement for estimated construction emissions. Following the completion of construction, estimated VMP Emissions from construction will be updated to account for actual emissions (where available) and updated estimates (where actual emissions cannot accurately be obtained). Any surplus or deficiency between first year estimates and actual construction emissions shall be added or subtracted (as needed) from year two VMP obligations

Operational emissions

The year one VMP Emissions from operations will be based on the Baseline Scenario minus prorated construction emissions, and incorporating any additional mitigation that NWIW commits to prior to the commencement of operations that reduce GHG emissions. At the end of the first year of Facility operation, the actual Project VMP Emissions shall be calculated using the methods provided in WAC Chap 173-441, as augmented by Attachment A and future VMP Board decisions on accounting methodologies. Any surplus or deficiency between first year estimates and actual VMP Emissions shall be added or subtracted (as needed) from year two VMP obligations.

For each subsequent year, VMP Emissions shall be measured, calculated or estimated using the methods provided in WAC Chap 173-441, together with the additional source methods for those sources not covered by WAC 173-441, as described in **Attachment A** or as authorized by the VMP Board in the future.

Verification of Emissions

Unless or until the Washington Clean Air Rule (WAC Ch. 173-442), which provides for certified third party verification of GHG reporting and mitigation is re-instated, the Department of Ecology may provide verification of all Project VMP GHG Emission reporting that would otherwise be subject to the reporting requirements of WAC Chapter 173-441. The VMP Board, following a consultation with the Department of Ecology and Cowlitz County (pending confirmation), will develop acceptable methods for third-party verification of those Project VMP GHG Emissions that are not covered by WAC Chapter 173-441.

NWIW has built accountability into the VMP by requiring the creation of a VMP Board, submitting annual GHG emission reporting and mitigation compliance to the Department of Ecology and Cowlitz County (pending confirmation), and by requiring that all VMP projects be verified by an independent third-party verification entity.

Attachment A

Project VMP GHG Emissions Scope (Within Washington)

GHG Emission Source	Methodology
Construction Emissions	
GHG emissions embedded in construction materials produced in WA	Apply LCA Methodology as updated based on the actual construction materials used. The VMP Board may update the LCA methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities.
Construction equipment emissions	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on facility operations; if not covered by WAC Ch. 173-441, LCA Methodology will be used, but final accounting will be updated based on actual emissions. The VMP Board may update the LCA methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities.
Other mobile source emissions, including transport of people and materials to and from the site by vehicle, rail, marine vessel, as applicable	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on mobile sources related to the project; if not covered by WAC Ch. 173-441, LCA Methodology will be used, but final accounting will be updated based on actual emissions to the extent feasible. The VMP Board may update the LCA methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities.
Onsite Direct Operations Emissions	
Facility operations emissions covered by WAC 173-441	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data on facility operations.
Onsite combustion, process and fugitive emissions not covered by WAC 173-441 <ul style="list-style-type: none"> • Mobiles sources used in operations • HVAC and refrigeration equipment • Other chemical processes • Equipment leaks not in 173-441 • Waste and wastewater • Accidental spills, accidents or releases, 	These emissions will be accounted for using actual data or, where actual data is not available, LCA Methodology will be used. The VMP Board may update the LCA methodology over the life of the project based on methodologies used by state, federal and international regulatory authorities.

<ul style="list-style-type: none"> • Research and development 	
Transportation Emissions	
Marine vessel emissions to 3-mile state limit	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible. Where actual data is not available, distances traveled and fuel efficiency of ships may be estimated.
On-road or off-road vehicle emissions is used to transport people or materials to site for operations	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible.
Upstream Natural Gas in-state	
Compressors	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to actual data to the extent feasible.
Regional, lateral and project distribution pipeline losses in state	Apply WAC Ch. 173-441 and 40 C.F.R. Part 98 to prorated leakage estimates based on proportion of gas in pipe consumed by Facility operations.
Purchased Power Supply	
Emissions associated with purchased electricity	PENDING ADDITIONAL DISCUSSION WITH COWLITZ COUNTY AND ECOLOGY IN LIGHT OF SB 5116.